



**CITY OF LODI
COUNCIL COMMUNICATION**

AGENDA TITLE: Adopt Resolution Amending Traffic Resolution 97-148 by Approving the Speed Limit Modifications, which Reduces the Speed Limit from 35 to 30 Miles Per Hour on Brandywine and Increases the Speed Limit from 40 to 45 Miles Per Hour on Pine Street, from Guild Avenue to East City Limits

MEETING DATE: May 17, 2006

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council adopt a resolution amending Traffic Resolution 97-148 by approving the speed limit modifications, which reduces the speed limit from 35 to 30 miles per hour on Brandywine and increases the speed limit from 40 to 45 miles per hour on Pine Street, from Guild Avenue to East City Limits, as shown on the attached Engineering and Traffic Surveys (Exhibit A).

BACKGROUND INFORMATION: Per the California Vehicle Code (CVC) Engineering and Traffic Surveys must be updated a minimum of every five years on all "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System. Streets with surveys that have exceeded five years cannot be radar enforced by the Police Department. The Police Department relies on these surveys not only for speed enforcement purposes, but for use in the courtroom in the event of a dispute from the person cited. The posting of speed limits are also coordinated with the Police Department due to their field expertise. In accordance with the CVC, speed limits on the following ten streets have been surveyed:

- Beckman Road
- Brandywine Drive
- California Street, Lockeford Street to Turner Road
- Central Avenue, Kettleman Lane to Lodi Avenue
- Cherokee Lane
- Church Street
- Elm Street
- Hutchins Street
- Pine Street
- Tokay Street

In accordance with CVC Section 40802 (b), Engineering and Traffic Surveys are performed in the City of Lodi following the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) California Supplement. The following important factors to consider in determining the speed limit, which is most appropriate to facilitate the orderly movement of traffic and reasonably safe are:

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the nearest 5 mph increment to the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of 5 mph.

APPROVED: 
Blair King, City Manager

Accidents - Accident records for two recent years are considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average Citywide accident rate is 3.9 ACC/MVM.

Unexpected Conditions - Highway, traffic, and roadside conditions not readily apparent to the driver are also considered. When roadside development results in traffic conflicts and unusual conditions, which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

In addition to the three primary factors described above, the following characteristics are also considered:

- Residential density
- Pedestrian and bicycle safety
- Roadway design speed
- Safe stopping sight distance
- Superelevation
- Shoulder conditions
- Profile condition
- Intersection spacing and offsets
- Commercial driveway characteristics
- Pedestrian traffic in the roadway without sidewalks

DISCUSSION/RECOMMENDATION: In May 2004, California adopted a new traffic manual which included changes in some of the guidelines used to establish speed limits. The major change was the relationship between the 85th percentile speed and selected speed limit. The previous guidelines indicated speed limits should normally be established at the first 5 mph increment below the 85th percentile speed. The current guidelines indicate speed limits should be established at the nearest 5 mph increment to the 85th percentile speed. While this change could potentially raise speed limits by 5 mph, the new guidelines consider residential density and bicycle and pedestrian safety as reasons to reduce speed limits. Therefore, in many cases, these changes offset each other, resulting in little affect on existing speed limits. A map showing existing and proposed speed limits is attached as Exhibit B.

Based on the study results, staff recommends City Council approve the speed limit modifications on Brandywine Drive from 35 to 30 mph and on Pine Street from Guild Avenue to east City limits from 40 to 45 mph. The portion of Central Avenue between Kettleman Lane and Vine Street will be reviewed again after bike lanes are installed later this year to determine if any changes in speed limits are warranted.

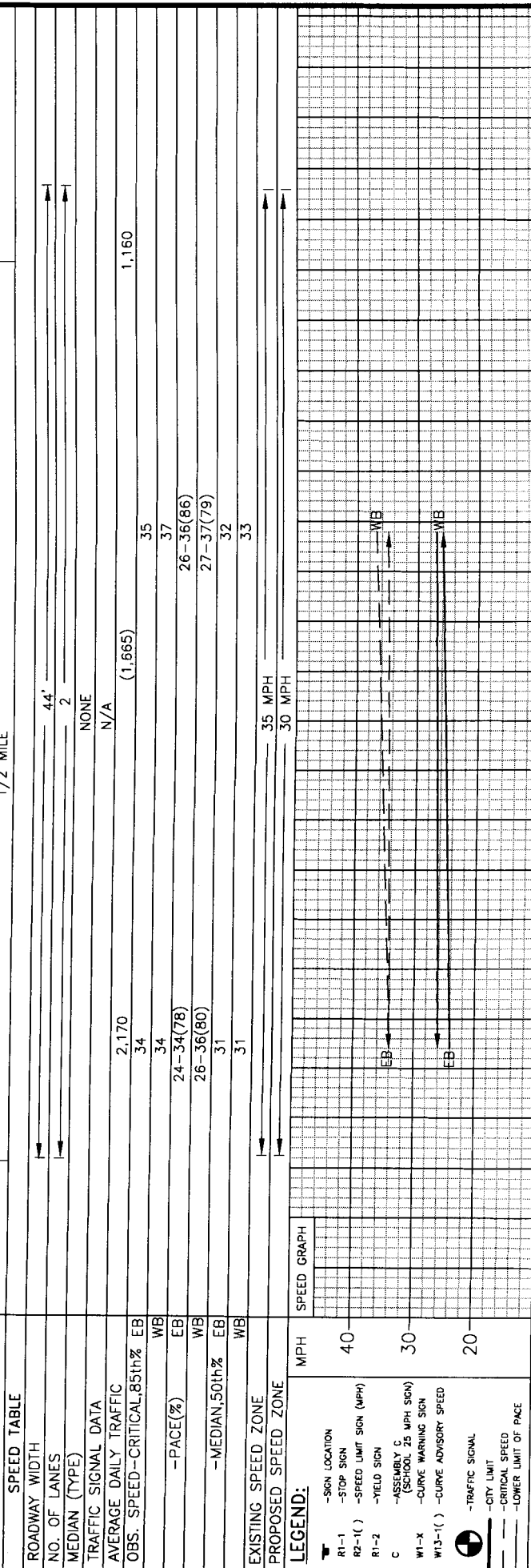
FISCAL IMPACT: None

FUNDING AVAILABLE: Funding for the modifications to speed limit signs and pavement legends from the Street Maintenance Account at an approximate cost of \$950.

Ruby R. Paiste
Ruby Paiste, Interim Finance Director

Richard C. Prima, Jr.
Richard C. Prima, Jr.
Public Works Director

SEE NARRATIVE FOR
BACKGROUND INFORMATION

[illegible]

SPEED ZONE REPORT – Brandywine Drive

- **REFERENCE** - Speed zone surveys are performed in the City of Lodi following the Federal Highway Administration MUTCD and MUTCD California Supplement in accordance with Section 40802 (b) of the California Vehicle Code.
- **STUDY CRITERIA** - Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are:

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the nearest five mile per hour (mph) increment to the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five mph.

Accidents - Accident records for two recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average Citywide accident rate is 3.9 ACC/MVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver were considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

Other Factors - The following factors were considered: residential density, pedestrian & bicycle safety, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics and pedestrian traffic in the roadway without sidewalks.

- **STUDY RESULTS**
Four radar surveys were performed and the 85th percentile speed ranged from 34 to 37 mph, as shown below:

<u>Street Segment</u>	<u>Eastbound</u>	<u>Westbound</u>
Ham Lane to Hutchins Street	34 & 35 mph	34 & 37 mph

Ham Lane to Hutchins Street

The 85th percentile speeds on this segment range from 34 to 37 mph. The 50th percentile speeds range from 31 to 33 mph. The accident rate of 5.0 is above the Citywide average and higher than the 1.5 rate from the 2001 survey. Based on the significant increase in accident rate and residential density, we recommend reducing the speed limit from 35 to 30 mph on this segment.

◦ CONCLUSION

The recommended speed limits are shown below:

STREET SEGMENT

Ham Lane to Hutchins Street

POSTED SPEED LIMIT

35 to 30 mph

F. Wally Sandelin
City Engineer

SEE NARRATIVE FOR
BACKGROUND INFORMATION

PR: RSK DH:	No.	Date	Revision	Approved By	APRIL	 CITY OF LODI PUBLIC WORKS DEPARTMENT	PINE ST Ham Ln to East City Limits	SPEED ZONE SURVEY
DATE: MAY 2006								

SPEED ZONE REPORT - Pine Street, Ham Lane to East City Limits

- **REFERENCE** - Speed zone surveys are performed in the City of Lodi following the Federal Highway Administration MUTCD and MUTCD California Supplement in accordance with Section 40802 (b) of the California Vehicle Code.
- **STUDY CRITERIA** - Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are:

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the nearest five mile per hour (mph) increment to the 85th percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five mph.

Accidents - Accident records for two recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average Citywide accident rate is 3.9 ACC/MVM.

Unexpected Conditions – Highway, traffic, and roadside conditions not readily apparent to the driver were considered. When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile may be justified.

Other Factors - The following factors were considered: residential density, pedestrian & bicycle safety, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics and pedestrian traffic in the roadway without sidewalks.

- **STUDY RESULTS**
Sixteen radar surveys were performed and the 85th percentile speeds ranged from 28 to 44 mph as shown below:

<u>Street Segment</u>	<u>Eastbound</u>	<u>Westbound</u>
Ham Lane to Hutchins Street	35 mph	34 mph
Hutchins Street to Church Street	31 mph	28 mph
Church Street to Stockton Street	28 mph	29 mph
Stockton Street to Central Avenue	32 mph	33 mph
Central Avenue to Cherokee Lane	35 mph	35 mph
Cherokee Lane to Beckman Road	31 mph	32 mph
Beckman Road to Guild Avenue	38 mph	40 mph
Guild Avenue to East City Limits	43 mph	44 mph

Ham Lane to Hutchins Street

The 85th percentile speeds on this segment are 35 and 36 mph. The 50th percentile speed is 30 mph. The accident rate of 5.7 in this segment is higher than the citywide average and below the 10.0 rate from the 2001 survey. Based solely on 85th percentile speeds, the speed limit could be set at 35 mph; however, due to the continuing high accident rate and residential density, we recommend retaining the 30 mph speed limit in this segment.

Hutchins Street to Church Street

The 85th percentile speeds on this segment are 28 and 31 mph. The 50th percentile speeds are 25 and 26 mph. The accident rate of 3.0 in this segment is higher than the citywide average and below the 7.0 rate from the 2001 survey. Based on the reduced accident rate at the current speed limit and residential density, we recommend retaining the 30 mph speed limit in this segment.

Church Street to Stockton Street

This portion of Pine Street consists of three segments. The only segment long enough to survey vehicle speeds is the portion from Sacramento Street to Stockton Street. The 85th percentile speeds on this segment are 28 and 29 mph. The 50th percentile speeds are 24 and 25 mph. The accident rate of 4.6 in this segment is higher than the citywide average and below the 9.0 rate from the 2001 survey. Based solely on 85th percentile speeds, the speed limit could be set at 30 mph; however, due to reduced accident rate at the current speed limit, we recommend retaining the 25 mph in this segment.

Stockton Street to Central Avenue

The 85th percentile speeds on this segment are 32 and 33 mph. The 50th percentile speeds are 29 and 30 mph. The accident rate of 10.0 in this segment is significantly higher than the citywide average and below the 14.6 from the 2001 survey. Based solely on the 85th percentile speeds, this segment could be posted at 30 mph; however, due to the continuing high accident rate and residential density, we recommend retaining the 25 mph speed limit in this segment .

Central Avenue to Cherokee Lane

The 85th percentile speed on this segment is 35 mph. The 50th percentile speed is 31 mph. The accident rate of 8.3 in this segment is significantly higher than the citywide average but below the 12.1 rate from the 2001 survey. Based solely on the 85th percentile speeds, the limit could be set at 35 mph; however, due to the continuing high accident rate and residential density, we recommend retaining the 30 mph speed limit in this segment.

Cherokee Lane to Beckman Road

The 85th percentile speeds on this segment are 31 and 32 mph. The 50th percentile speed is 27 mph. The accident rate of 2.7 in this segment is lower than the citywide average and below the 12.8 rate from the 2001 survey. Based solely on the 85th percentile speeds, the speed limit could be set at 30 mph; however, due to the reduced accident rate at the current speed limit, we recommend retaining the 25 mph speed limit in this segment.

Beckman Road to Guild Avenue

The 85th percentile speeds on this segment are 38 and 40 mph. The 50th percentile speeds are 33 and 34 mph. The accident rates of 6.1 in this segment is higher than the citywide average and above the 3.2 rate from the 2001 survey. Based solely on the 85th percentile speeds, the speed limit could be set at 40 mph; however, due to the increased accident rate at the current speed limit, we recommend retaining the 35 mph speed limit in this segment.

Guild Avenue to East City Limits

The 85th percentile speeds on this segment are 43 and 44 mph. The 50th percentile speeds are 37 and 38 mph. There have been no reported accidents occurring in this segment. Based on the 85th percentile speeds and absence of accidents, we recommend increasing the speed limit on this segment from 40 to 45 mph.

◦ CONCLUSION

The recommended speed limits are shown below:

<u>SEGMENT</u>	<u>POSTED SPEED LIMIT</u>
Ham Lane to Hutchins Street	30 mph (no change)
Hutchins Street to Church Street	30 mph (no change)
Church Street to Stockton Street	25 mph (no change)
Stockton Street to Central Avenue	30 mph (no change)
Central Avenue to Cherokee Lane	30 mph (no change)
Cherokee Lane to Beckman Road	25 mph (no change)
Beckman Road to Guild Avenue	35 mph (no change)
Guild Avenue to East City Limits	40 to 45 mph

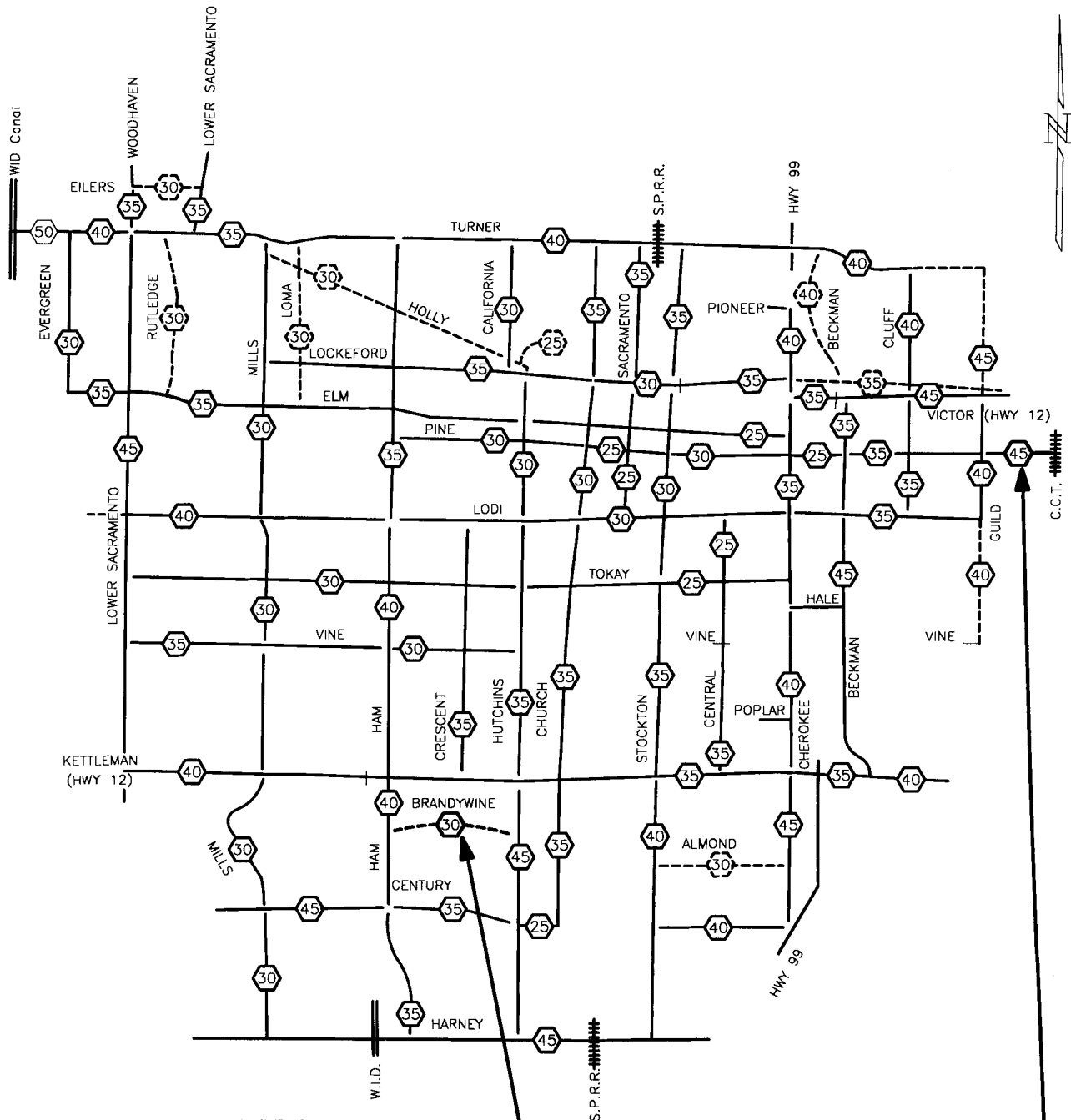
F. Wally Sandelin
City Engineer



CITY OF LODI

PUBLIC WORKS DEPARTMENT

POSTED SPEED LIMITS



LEGEND

- STREET WITH SPEED ZONE (NON-LOCAL STREET)
- "LOCAL" STREET WITH SPEED ZONE (VC 40802)

PRIMA FACIE LIMITS APPLY TO STREETS
NOT SHOWN - ALL "LOCAL" STREETS

Proposed Speed
Limit Modifications

RESOLUTION NO. 2006-93

A RESOLUTION OF THE LODI CITY COUNCIL APPROVING
SPEED LIMIT MODIFICATIONS ON BRANDYWINE DRIVE AND ON
PINE STREET FROM GUILD AVENUE TO EAST CITY LIMITS,
THEREBY AMENDING TRAFFIC RESOLUTION NO. 97-148

WHEREAS, speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code, which are outlined in Chapter 8 of the Caltrans Traffic Manual, and the Federal Highway Administration MUTCD and MUTCD California Supplement; and

WHEREAS, per §40802(b) of the California Vehicle Code, Engineering and Traffic Surveys must be updated a minimum of every five years on "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System, and speed limits on streets where surveys are older than five years cannot be enforced using radar; and

WHEREAS, the Public Works Department recently performed Engineering and Traffic Surveys on the following streets: Beckman Road, Brandywine Drive, California Street – Lockeford Street to Turner Road, Central Avenue – Kettleman Lane to Lodi Avenue, Cherokee Lane, Church Street, Elm Street, Hutchins Street, Pine Street, and Tokay Street; and

WHEREAS, staff recommends speed limit modifications as follows:

<u>Street Segment</u>	<u>Existing</u>	<u>Proposed</u>
Brandywine Drive	35 mph	30 mph
Pine Street from Guild Avenue to east City limits	40 mph	45 mph

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lodi does hereby approve the proposed speed limit modifications on Brandywine Drive and Pine Street as shown above; and

BE IT FURTHER RESOLVED that the City of Lodi Traffic Resolution No. 97-148, Section 7, "Speed Limits," is hereby amended by designating speed limit modifications as shown above.

Dated: May 17, 2006

I hereby certify that Resolution No. 2006-93 was passed and adopted by the City Council of the City of Lodi in a regular meeting held May 17, 2006, by the following vote:

AYES: COUNCIL MEMBERS – Beckman, Hansen, Johnson, and Mayor Hitchcock
NOES: COUNCIL MEMBERS – Mounce
ABSENT: COUNCIL MEMBERS – None
ABSTAIN: COUNCIL MEMBERS – None


SUSAN J. BLACKSTON
City Clerk

CITY COUNCIL

SUSAN HITCHCOCK,
Mayor

BOB JOHNSON,
Mayor Pro Tempore

JOHN BECKMAN

LARRY D. HANSEN

JOANNE MOUNCE

CITY OF LODI



PUBLIC WORKS DEPARTMENT

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BLAIR KING,
City Manager

SUSAN J. BLACKSTON,
City Clerk

D. STEPHEN SCHWABAUER,
City Attorney

RICHARD C. PRIMA, JR.,
Public Works Director

May 11, 2006

Mr. Don Klade
915 Brandywine Drive
Lodi, CA 95240

SUBJECT: Adopt Resolution Amending Traffic Resolution 97-148 by Approving the Speed Limit Modifications, which Lowers the Speed Limit from 35 to 30 Miles Per Hour on Brandywine Drive and Increases the Speed Limit from 40 to 45 Miles Per Hour on Pine Street from Guild Avenue to East City Limits

Enclosed is a copy of background information on an item on the City Council agenda of Wednesday, May 17, 2006. The meeting will be held at 7 p.m. in the City Council Chamber, Carnegie Forum, 305 West Pine Street.

This item is on the consent calendar and is usually not discussed unless a Council Member requests discussion. The public is given an opportunity to address items on the consent calendar at the appropriate time.

If you wish to write to the City Council, please address your letter to City Council, City of Lodi, P. O. Box 3006, Lodi, California, 95241-1910. Be sure to allow time for the mail. Or, you may hand-deliver the letter to City Hall, 221 West Pine Street.

If you wish to address the Council at the Council Meeting, be sure to fill out a speaker's card (available at the Carnegie Forum immediately prior to the start of the meeting) and give it to the City Clerk. If you have any questions about communicating with the Council, please contact Susan Blackston, City Clerk, at 333-6702.

If you have any questions about the item itself, please call Rick Kiriu, Senior Engineering Technician – Traffic, at 333-6800, extension 2668.

P. Farris

for: Richard C. Prima, Jr.
Public Works Director

RCP/pmf

Enclosure

cc: City Clerk

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